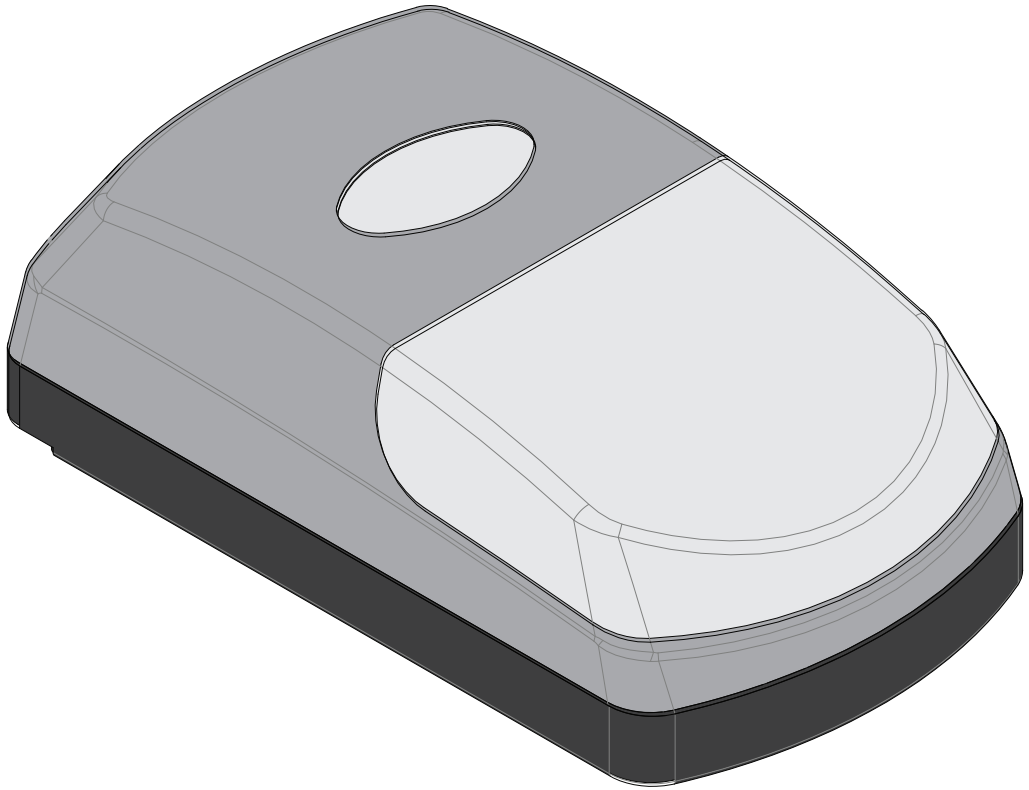
KVM 25

OPERATION MANUAL / INSTALLER

Motorline® PROFESSIONAL



v1.0
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00. CONTENTS

▷ INDEX

01. SAFETY INSTRUCTIONS

STANDARDS TO FOLLOW ◁

ATTENTION:

▷ To ensure the safety of people, it is important that you read all the following instructions.Incorrect installation or incorrect use of the product can cause physical injury and material damage.

▷ Keep these instructions in a safe place for future reference.

▷ This product was designed and produced strictly for the use indicated in this manual. Any other use, not expressly indicated here, could compromise the good condition/operation of the product and/or be a source of danger.

▷ **ELECTROCELOS SA** is not responsible for the improper use of the product, or other use than that for which it was designed.

▷ **ELECTROCELOS SA** is not responsible if safety standards were not taken into account when installing the equipment, or for any deformation that may occur to it.

▷ **ELECTROCELOS SA** is not responsible for the safety and proper operation when using components not sold by them.

▷ Do not make any modifications to the operator components and / or their accessories.

▷ Beffore installation unplug the automatism from the source of power.

▷ The installer must inform the client how to handle the product in case of emergency and provide this manual to user.

▷ Keep remote controls away from children, to prevent the automated system from being activated involuntarily.

▷ The customer shall not, under any circumstances, attempt to repair or tune the operator .Must call qualified technician only.

▷ Connect the automatism to a 230V plug with ground wire.

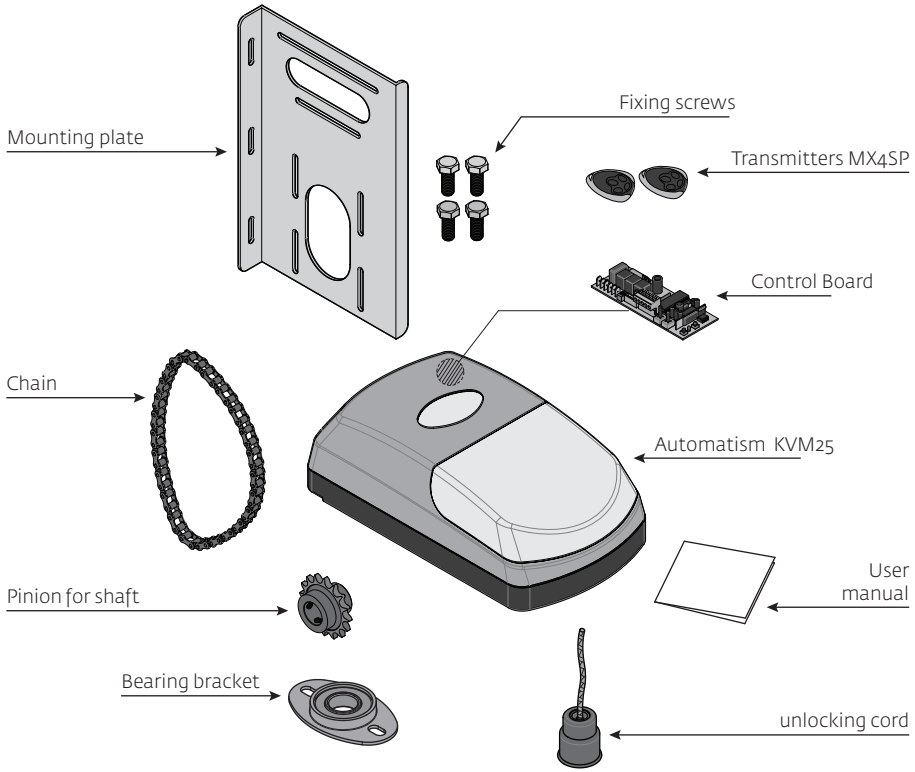
▷ Operator for outdoor and indoor use.

02. THE PACKAGE

▷ INSIDE THE PACKAGE

Inside the package you will find the following components:

- ▷ **01** automatism KVM25
- ▷ **01** control board (inside motor)
- ▷ **02** four channel transmitters MX4SP
- ▷ **01** mounting plate
- ▷ **01** chain
- ▷ **01** pinion for Ø25mm shaft
- ▷ **01** bearing bracket
- ▷ **04** fixing screws
- ▷ **01** unlocking cord
- ▷ **01** user manual

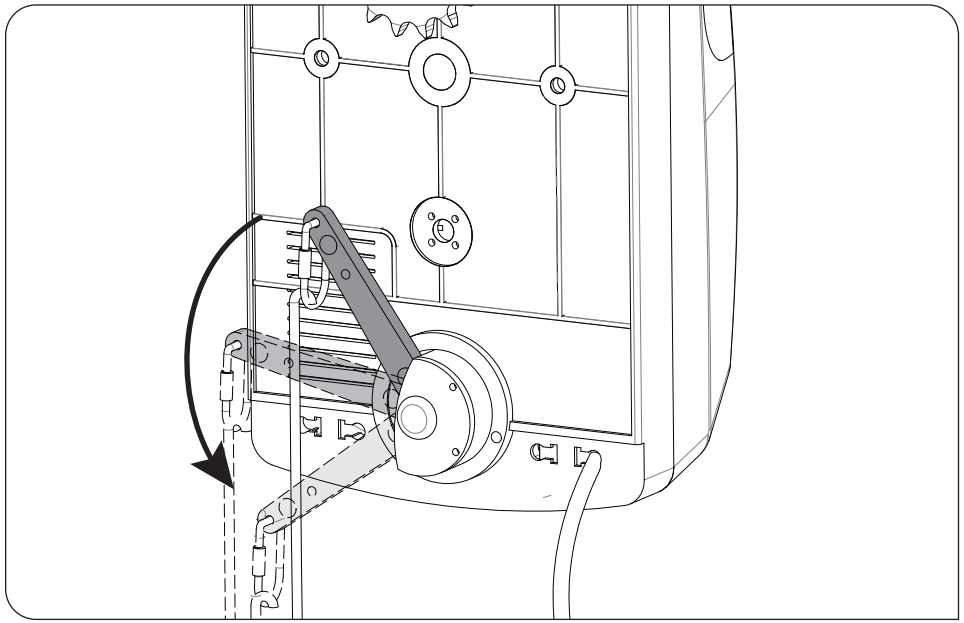


03. THE AUTOMATISM

LOCK / UNLOCK ◁

The automatism unlock function allows the user to open and close the gate manually, without having to remove the motor from the installation site.
This funcionality is specially important in emergency cases and/or power cuts.

To lock or unlock the automatism just pull down the lever as shown in the following image.
The lever has a spring that will bring it up to the starting point.
Each time you pull the lever down and rise completely, you will unlock or lock the automatism.
When pulling down, a small sound of gears engaging means that the lock/unlock was successfully performed.



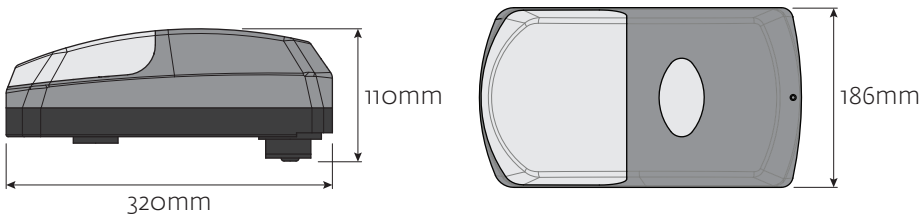
03. THE AUTOMATISM

▷ TECHNICAL SPECIFICATIONS

KVM25 specifications are as follow:

	KVM25
▷ Power Supply	AC 230V 50/60Hz
▷ Power	80W
▷ Current	8A
▷ RPM	20 RPM
▷ Noise level	<65dB
▷ Force	30N
▷ Operating temperatures	-30°C a 65°C
▷ Transformer	100W
▷ Protection class	IP20
▷ Work Rate	30ciclos / h
▷ Fuses	220V 1A - 24V 10A

KVM25 dimensions are the following:



04. INSTALLATION

PRE-INSTALLATION INFO ◁

For a proper installation and a durable performance of KVM25, be aware of the following parameters:

▷ Please read all steps of this manual at least once, so that you know the full process before starting the real assembling.

▷ This equipment can only be installed on sectional doors with a maximum area of 18m2.

▷ Please make sure that the door's structure is solid and in good conditions to be automated.

▷ Make sure that the sectional door has no mechanical anomalies, they may affect the automatism's durability .

▷ To check if the door is in good condition for the motor to be installed, manually raise it to 800mm, 1600mm and 2000mm from the floor and drop it.
The door must remain suspended in that position or going down very slightly.
If this does not happen, check the springs condition.

▷ Check the surrounding space. Carefully evaluate potential dangers that can cause physical damage and possible contact with bugs, infiltrations or others.

▷ Please make sure that the automatism will be connected to a 230V power supply, protected with earth wire.

▷ Please check if there is apropriate electronic protection against short-circuits/current peaks, and earth wire on the main electric board.

▷ Be carefull in case of manually operating the control board. The incorrect usage can damage some sensible electronic components.

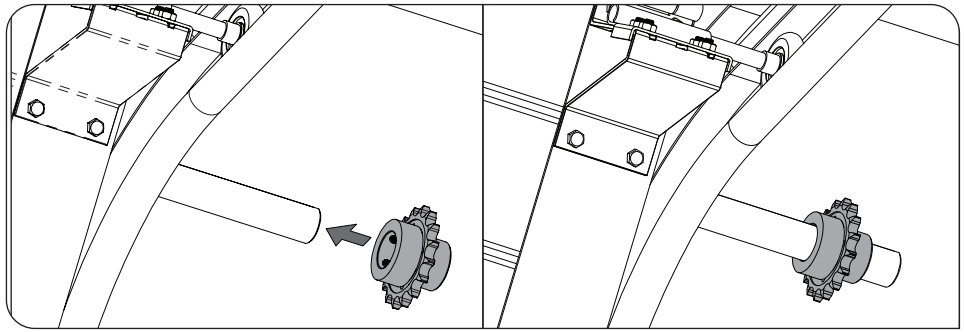
▷ Check if you have all the necessary material ready for the installation.

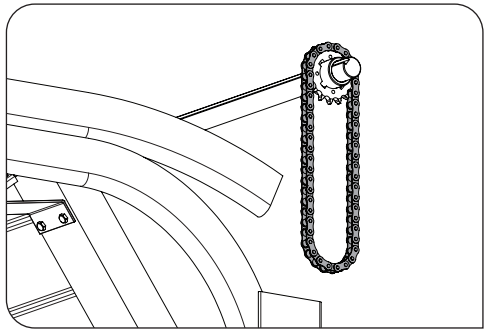
▷ Check all safety devices to install. This will ensure that unexpected accidents won't happen.

It is very important that before installation, make sure the springs are adjusted according to the door's weight!

▷ AUTOMATISM INSTALLATION

In the illustrated diagrams below and on the following page, are represented the procedures for proper installation of the motor KVM25.

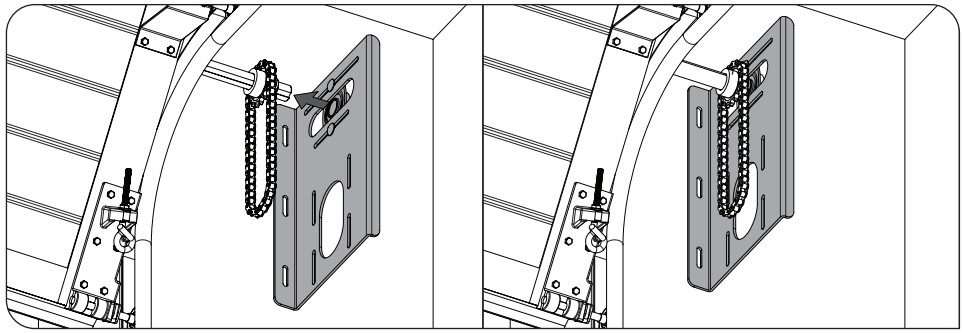




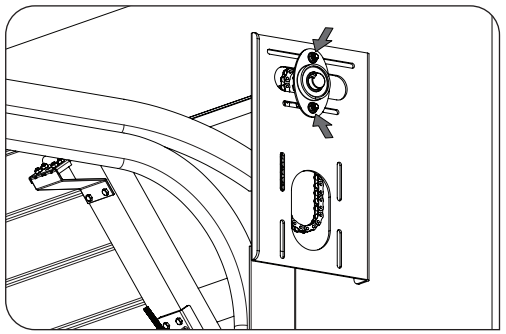
↑ **01** - Place the pinion on the Ø25mm spring's shaft of the sectional door.

← **02** - Place the chain over the pinion leaving it hanged.

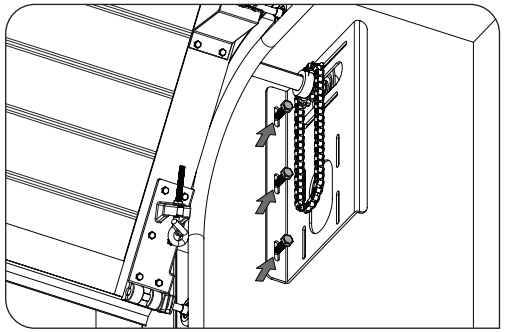
↓ **03** - Pass the Ø25mm shaft through the bearing on the support plate .



AUTOMATISM INSTALLATION ◁

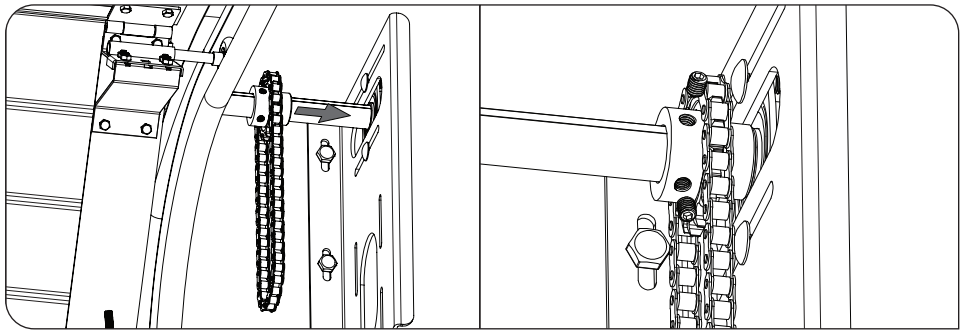


← **04** - Slightly loosen the bearing bracket's screws (left),to be able to move it sideways.



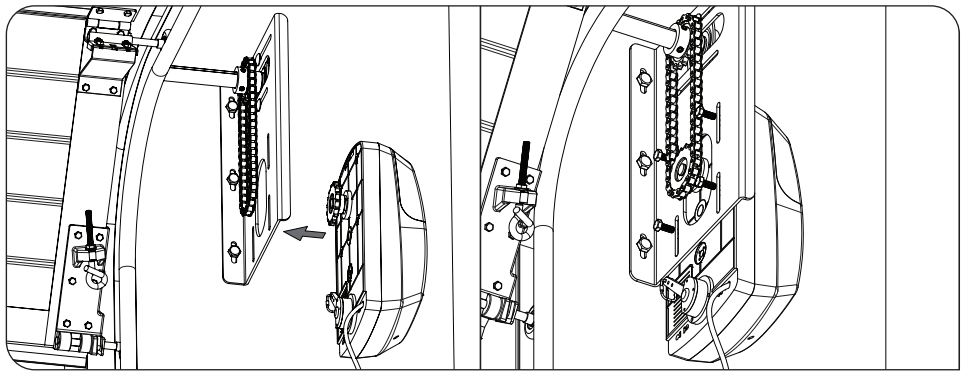
← **05** - Pull the metal plate to the wall and secure with the screws.
After fixing the plate, tighten the bearing bracket's screws back to fix it too.

↓ **06** - Pull the pinion to the bearing and tighten the two bolts to secure the pinion to the shaft.

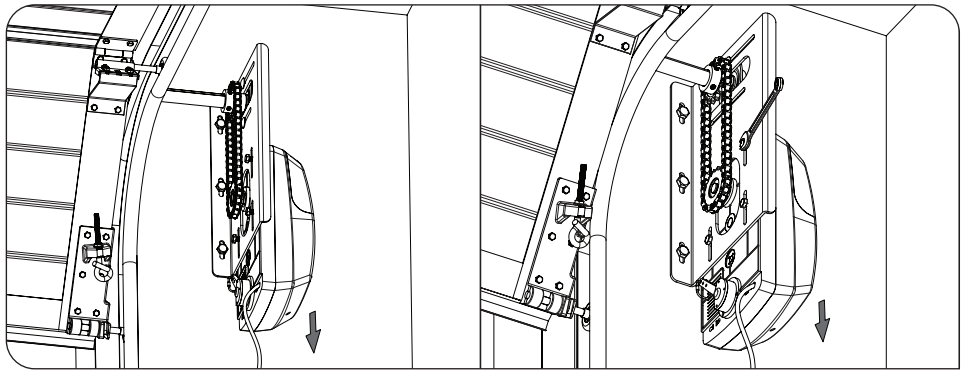


It is very important that these quotas are respected! Only in this way the correct functioning and durability of automatism can be assured!

▷ AUTOMATISM INSTALLATION



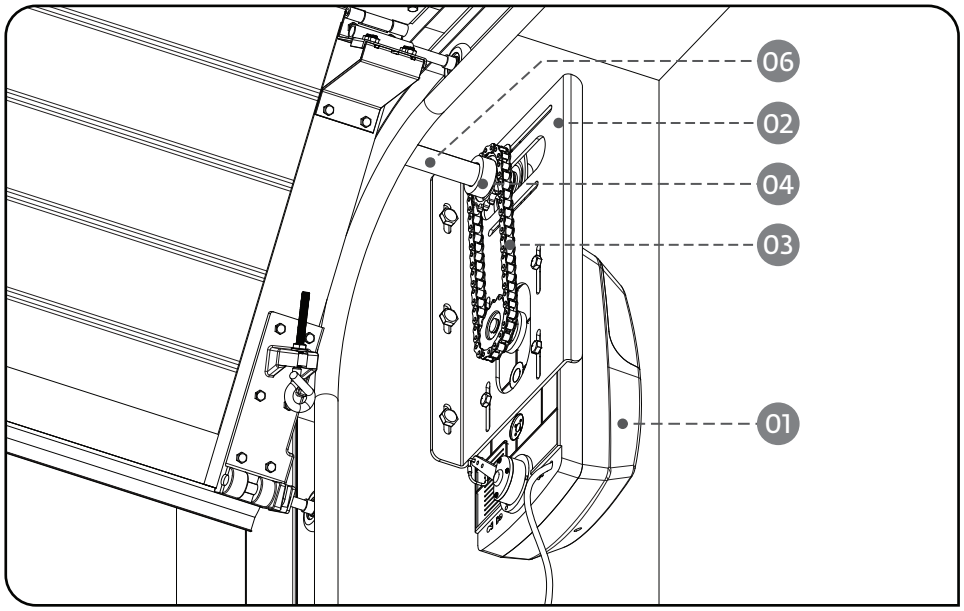
↑ **07** - Place the automatism on the support plate (left), and assemble the chain on the motor's pinion as you can see on the right image.
Place the screws on the motor in order to support it on the metal plate, without tightening them completely, so that you are able to adjust the automatism.

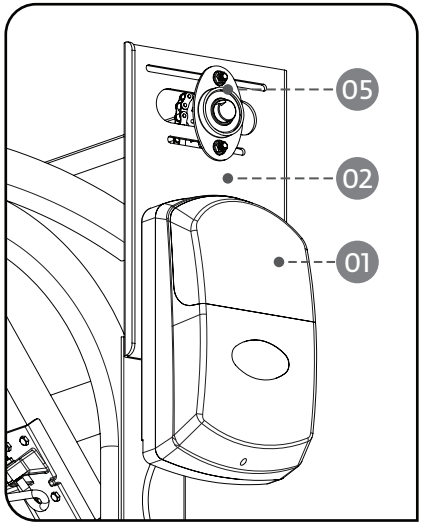


↑ **08** - With the bolts still loose, pull the engine down in order to tighten the chain. While pulling down, fasten the 4 motor bolts to secure it on the support plate. The automatism is now installed.

04. INSTALLATION

INSTALLATION MAP ◁

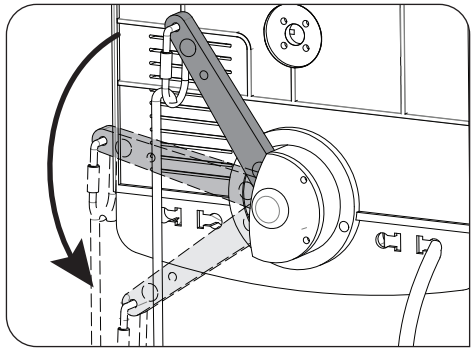




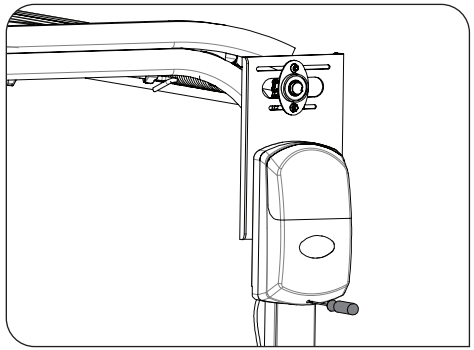
LEGEND:
01 ▷ motor KVM25
02 ▷ support plate
03 ▷ chain
04 ▷ pinion for Ø25mm shaft
05 ▷ bearing bracket
06 ▷ Ø25mm sectional door's shaft

▷ PROGRAMMING LIMIT SWITCHES

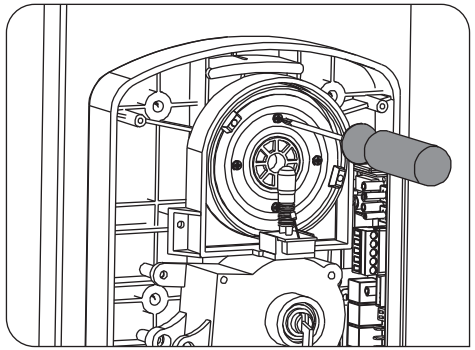
In the illustrated diagrams below and on the following page are represented the procedures for proper programming of the motor KVM25 limit switches, once installed on the gate.



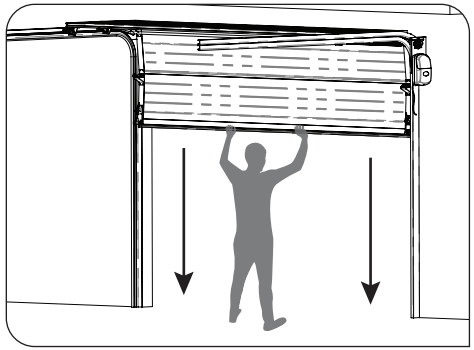
01 - Unlock the motor, pulling the lever down. You will hear a little click when pulling down, and then you must let the lever go up.



02 - Open the automatism cover with a screwdriver and connect the motor to a power source at 230V.



03 - Slightly loosen the 4 screws of the magnetic actuator.

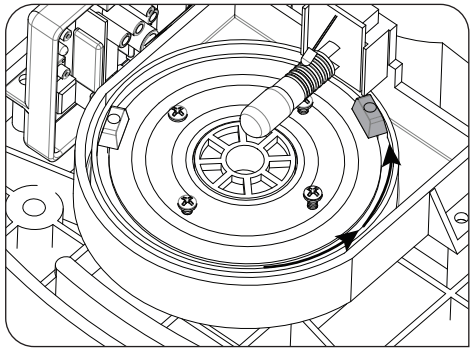


04 - Manually pull the door into the closed position.

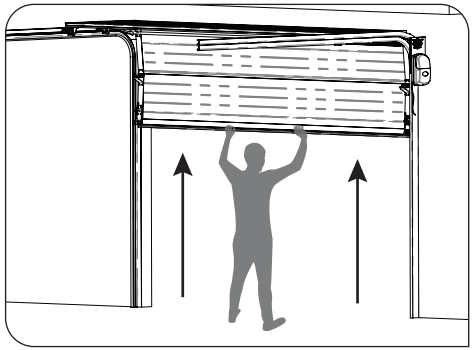
It is very important that these quotas are respected! Only in this way the correct functioning and durability of automatism can be assured!

05. PROGRAMMING

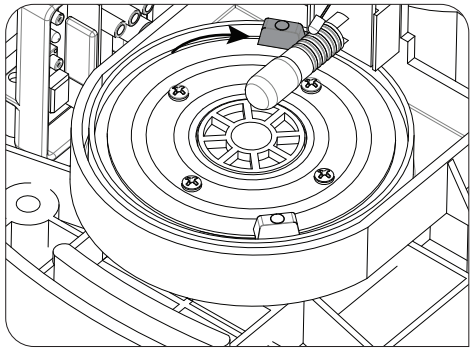
PROGRAMMING LIMIT SWITCHES ◁



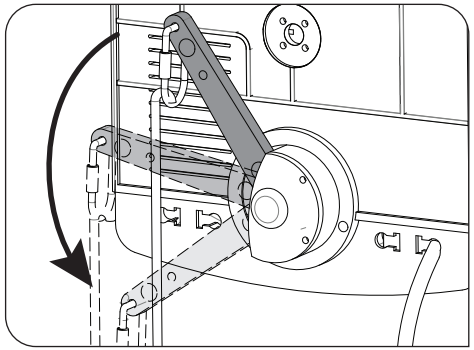
05 - Move the close magnetic actuator near the sensor until the red LED lights up. This indicates that the limit switch will activate in that exact position.



06 - Manually move the door to the open position.



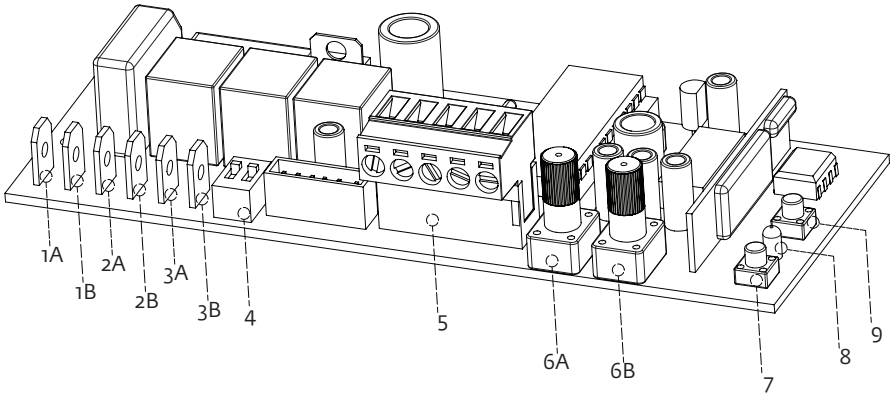
07 - Move the opening magnetic actuator near the sensor until the red LED lights up. This indicates that the limit switch will activate in that exact position.
Now tighten the 4 screws of the magnetic actuator.



08 - Lock the motor and test the door opening and closing using either the "PUSH" button on the control board or the transmitter. If necessary, repeat the previous steps, from the image 03, to better tune the limit switches.

05. PROGRAMMING

▷ DESCRIPTION



CONTROL BOARD

01 ▷ Battery Input (A - Positive | B - Negative)
02 ▷ Transformer Input
03 ▷ Motor Cable Input (A - Black | B - Red)
04 ▷ Dip-Switches
05 ▷ Connector J5
06 ▷ Force ajusting potentiometers
07 ▷ Button "**PUSH**"
08 ▷ LED "**LEARN**"
09 ▷ Button "**LEARN**" (programming button)

▷ DIP-SWITCHES

	ON (UP)	OFF (DOWN)
Dip 1	Automatism is installed on the right of the gate (seen from inside).	Automatism is installed on the left of the gate (seen from inside).
Dip 2	Enable automatic closing. (Pause time 1 minute fixed)	Disable automatic closing.

05. PROGRAMMING

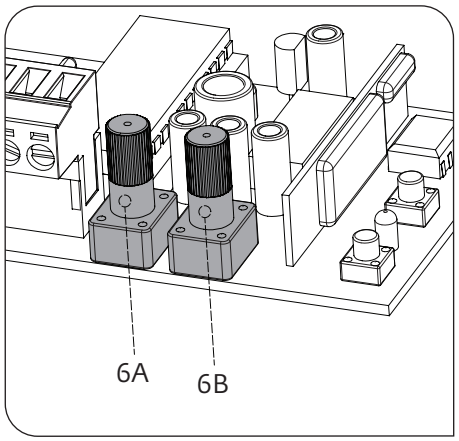
POTENTIOMETERS AJUSTMENT ◁

▷ MOTOR INSTALLED ON LEFT SIDE:

6A▷ This potentiometer adjusts the motor's power when closing
6B▷ This potentiometer adjusts the motor's power when opening

▷ MOTOR INSTALLED ON RIGHT SIDE:

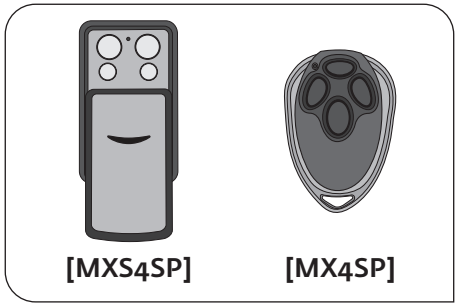
6A▷ This potentiometer adjusts the motor's power when opening
6B▷ This potentiometer adjusts the motor's power when closing



TRANSMITTER PROGRAMMING ◁

1▷ Click once on the LEARN button and the LEARN LED will light up.
2▷ Press once on the transmitter's button you wish to operate. The LED will flash three times, indicating successful programming.

NOTE: To program multiple transmitters, repeat the same steps for each transmitters.

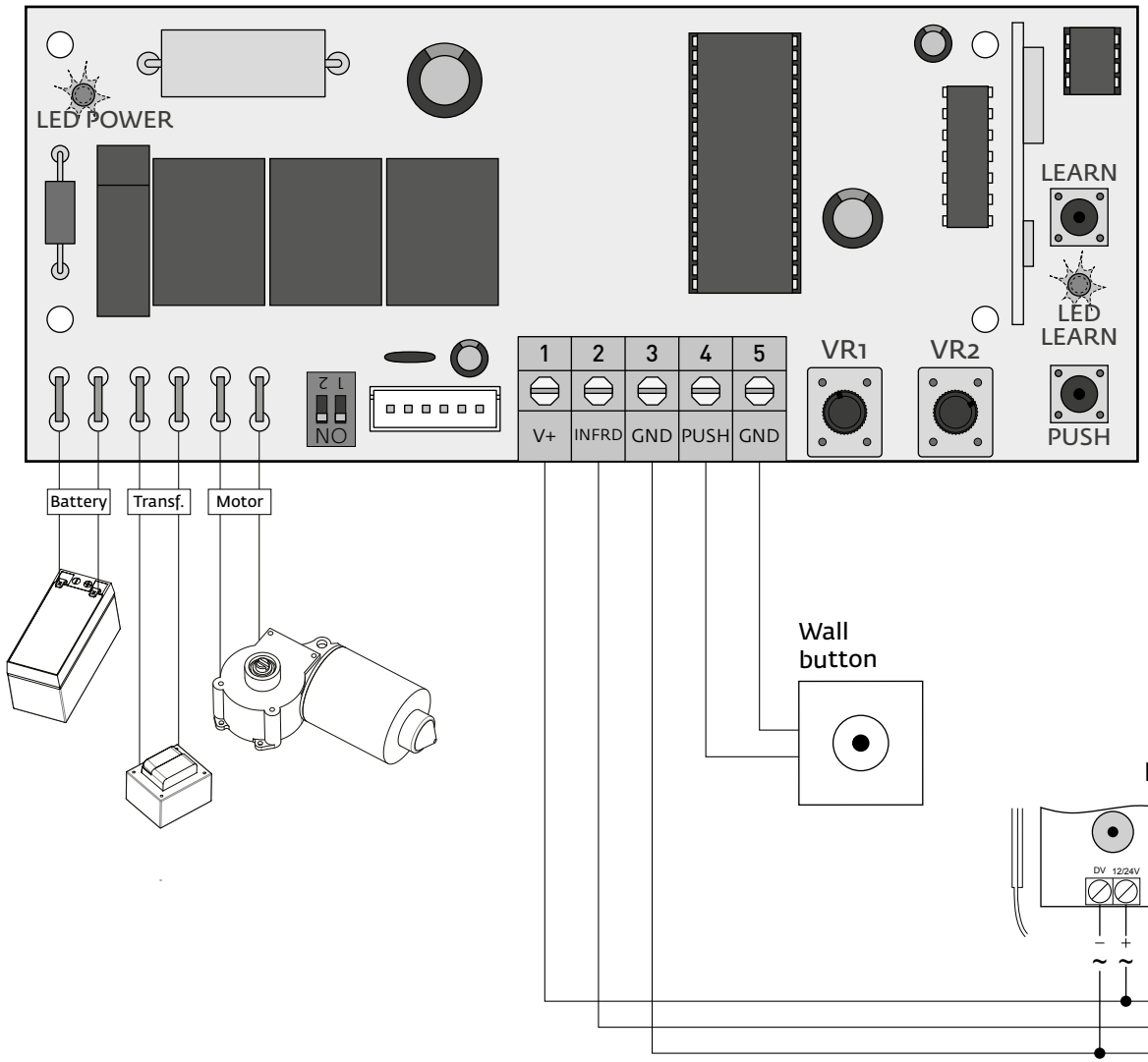


RESET CONTROL BOARD'S MEMORY ◁

1▷ Press and hold the LEARN button for eight seconds.
The LEARN LED will flash three times, indicating the success of the operation.

06. CONNECTION SCHEME

▷ CONNECTING COMPONENTS TO CONTROL BOARD



CONNECTOR 2 (INF) - Works without photocells, not needing shunt.

CONNECTOR 1 (v+) - 15 VDC 1.5W máx.